Guide to Key Rule Citations Referenced in Indiana's Antidegradation Standards and Implementation Rule, 327 IAC 2-1.3

ARTICLE 2. WATER QUALITY STANDARDS

There are a number of references in the draft Antidegradation Standards and Implementation Procedures Rule that cite Indiana's Water Quality Standards at 327 IAC 2. The standards include:

Rule 1. Water Quality Standards Applicable to All State Waters Except Waters of the State Within the Great Lakes System; and

Rule 1.5. Water Quality Standards Applicable to All State Waters Within the Great Lakes System [GLS]

A PDF of Article 2 in its entirety may be found at the following link:
http://www.in.gov/legislative/iac/T03270/A00020.PDF

Some of the specific Water Quality Standard (WQS) citations referenced are listed below.

327 IAC 2-1-3 Surface water use designations; multiple uses

Authority: IC 13-14-8; IC 13-14-9; IC 13-18-3
Affected: IC 13-18-4
Sec. 3. (a) The following water uses are designated by the water pollution control board:
(1) Except as provided in subsection (c), surface waters of the state are designated for full body contact recreation as provided in section 6(d) of this rule.
(2) All waters, except as described in subdivision (5), will be capable of supporting:
(A) a well-balanced, warm water aquatic community; and
(B) where natural temperatures will permit, put-and-take trout fishing.
All waters capable of supporting the natural reproduction of trout as of February 17, 1977, shall be so maintained.
(3) All waters that are used for public or industrial water supply must meet the standards for those uses at the points where the water is withdrawn. This use designation and its corresponding water quality standards are not to be construed as imposing a user restriction on those exercising or desiring to exercise the use.
(4) All waters that are used for agricultural purposes must, as a minimum, meet the standards established in section 6(a) of this rule.
(5) All waters in which naturally poor physical characteristics (including lack of sufficient flow), naturally poor chemical quality, or irreversible man-induced conditions, which came into existence before January 1, 1983, and having been established by use attainability analysis, public comment period, and hearing:
(A) may qualify to be classified for limited use; and
(B) must be evaluated for restoration and upgrading at each triennial review of this rule.

Specific waters of the state designated for limited use are listed in section 11(a) of this rule.
(6) All waters that:
(A) provide unusual aquatic habitat;
(B) are an integral feature of an area of exceptional natural beauty or character; or
(C) support unique assemblages of aquatic organisms:
may be classified for exceptional use. Specific waters of the state designated for exceptional use are listed in section 11(b) of this rule.
(b) Where multiple uses have been designated for a body of water, the most protective of all simultaneously applicable standards will apply.
(c) A CSO wet weather limited use designation is established as a subcategory of the recreational use designation established under subsection (a). This subcategory shall be applied in accordance with section 3.1 of this rule.

327 IAC 2-1-9 Definitions - Bioaccumulative chemicals of concern
Authority: IC 13-14-8; IC 13-14-9; IC 13-18-3
Affected: IC 13-11-2-265; IC 13-18-3-2; IC 13-18-4
Sec. 9. In addition to the definitions contained in IC 13-11-2 and 327 IAC 1, the following definitions apply throughout this
title:
(5) "Bioaccumulative chemical of concern" or "BCC" refers to the following substances:
Table 9-1
Bioaccumulative Chemicals of Concern

CAS Number	Substance
309002	Aldrin
57749	Chlordane
72548	4,4'-DDD; p,p'-DDD; 4,4'-TDE; p,p'-TDE
72559	4,4'-DDE; p,p'-DDE
50293	4,4'-DDT; p,p'-DDT
60571	Dieldrin
72208	Endrin
76448	Heptachlor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene; hexachloro-1,3-butadiene
608731	Hexachlorocyclohexanes; BHCs
319846	alpha-Hexachlorocyclohexane; alpha-BHC
319857	beta-Hexachlorocyclohexane; beta-BHC
319868	delta-Hexachlorocyclohexane; delta-BHC
58899	Lindane; gamma-Hexachlorocyclohexane; gamma-BHC
7439976	Mercury
2385855	Mirex
29082744	Octachlorostyrene
1336363	PCBs; polychlorinated biphenyls
608935	Pentachlorobenzene

39801144	Photomirex
1746016	2,3,7,8-TCDD; dioxin
634662	1,2,3,4-Tetrachlorobenzene
95943	1,2,4,5-Tetrachlorobenzene
8001352	Toxaphene

327 IAC 2-1.5-5 Surface water use designations; multiple uses [GLS]
Authority: IC 13-14-8; IC 13-14-9; IC 13-18-3
Affected: IC 13-18-4; IC 13-30-2-1
Sec. 5. (a) The following water uses are designated by the board:
(1) Except as provided in subsection (c), surface waters of the state within the Great Lakes system are designated for full-body contact recreation.
(2) All surface waters, except as described in subdivision (7), shall be capable of supporting a well-balanced, warm water aquatic community.
(3) Where natural temperatures will permit, surface waters shall be capable of supporting put-and-take trout fishing. All waters capable of supporting the natural reproduction of trout shall be so maintained. The following waters are designated as salmonid waters and shall be capable of supporting a salmonid fishery:
(A) Trail Creek and its tributaries downstream to Lake Michigan.
(B) East Branch of the Little Calumet River and its tributaries downstream to Lake Michigan via Burns Ditch.
(C) Salt Creek above its confluence with the Little Calumet River.
(D) Kintzele Ditch (Black Ditch) from Beverly Drive downstream to Lake Michigan.
(E) The Galena River and its tributaries in LaPorte County.
(F) The St. Joseph River and its tributaries in St. Joseph County from the Twin Branch Dam in Mishawaka downstream
to the Indiana/Michigan state line.
(G) The Indiana portion of the open waters of Lake Michigan.
(H) Those waters designated by the Indiana department of natural resources for put-and-take trout fishing.
(4) All surface waters used for public water supply are designated as a public water supply. This use designation and its corresponding water quality criteria are not to be construed as imposing a user restriction on those exercising or desiring to exercise the use.
(5) All surface waters used for industrial water supply are designated as an industrial water supply. This use designation and its corresponding water quality criteria are not to be construed as mposing a user restriction on those exercising or desiring to exercise the use.
(6) All surface waters used for agricultural purposes are designated as an agricultural use water.
(7) Limited use waters are designated under section 19(a) of this rule pursuant to section 18 of this rule. All waters that are designated as a limited use water under section 19(a) of this rule must be evaluated for restoration and upgrading at each triennial review of this rule.
(8) Outstanding state resource waters are designated under section 19(b) of this rule pursuant to section 18 of this rule.
(b) Where multiple uses have been designated for a body of water, the most protective of all simultaneously applicable standards will apply.
(c) A CSO wet weather limited use designation is established as a subcategory of the recreational use designation established under subsection (a). This subcategory shall be applied in accordance with 327 IAC 2-1-3.1.

327 IAC 2-1.5-6 Bioaccumulative chemicals of concern [GLS]
Authority: IC 13-14-8; IC 13-14-9; IC 13-18-3
Affected: IC 13-18-4; IC 13-30-2-1
Sec. 6. (a) A bioaccumulative chemical of concern (BCC) is any chemical that meets the following requirements:
(1) Has the potential to cause adverse effects.
(2) Has a half-life of at least eight (8) weeks in the water column, sediment, and biota.
(3) Upon entering the surface waters, by itself or as its toxic transformation product, accumulates in aquatic organisms by a human health bioaccumulation factor (BAF) greater than one thousand (1,000) after considering metabolism and other physicochemical properties that might enhance or inhibit bioaccumulation, in accordance with the procedure in section 13 of this rule. The minimum BAF information needed to define a chemical as a BCC is either of the following:
(A) For an organic chemical, either a field-measured BAF or a BAF derived using the BSAF methodology.
(B) For an inorganic chemical, including an organometal, either a field-measured BAF or a laboratory-measured BCF.
(b) Pollutants that are BCCs include, but are not limited to, the following:
Table 6-1: Bioaccumulative Chemicals of Concern

CAS Number	Substance
57749	Chlordane
72548	4,4'-DDD; p,p'-DDD; 4,4'-TDE; p,p'-TDE
72559	4,4'-DDE; p,p'-DDE
50293	4,4'-DDT; p,p'-DDT
60571	Dieldrin
118741	Hexachlorobenzene
87683	Hexachlorobutadiene; hexachloro-1,3-butadiene
608731	Hexachlorocyclohexanes; BHCs
319846	alpha-Hexachlorocyclohexane; alpha-BHC
319857	beta-Hexachlorocyclohexane; beta-BHC
319868	delta-Hexachlorocyclohexane; delta-BHC
58899	Lindane; gamma-Hexachlorocyclohexane; gamma-BHC
7439976	Mercury
2385855	Mirex
29082744	Octachlorostyrene
1336363	PCBs; polychlorinated biphenyls
608935	Pentachlorobenzene
39801144	Photomirex
1746016	2,3,7,8-TCDD; dioxin
634662	1,2,3,4-Tetrachlorobenzene
95943	1,2,4,5-Tetrachlorobenzene
8001352	Toxaphene

(c) The substances established in this subsection shall be treated as BCCs under this rule and under 327 IAC 5-2-11.3 through 327 IAC 5-2-11.6. If additional data becomes available (such as a field-measured BAF) for a substance established

in this subsection that conclusively demonstrates that the substance should not be treated as a BCC, the commissioner may determine that it is not necessary to treat the substance as a BCC. Substances treated as BCCs include the following:

Table 6-2: Substances Treated as Bioaccumulative Chemicals of Concern

CAS Number	Substance
309002	Aldrin
72208	Endrin
76448	Heptachlor

327 IAC 2-1-6 Minimum surface water quality standards
Authority: IC 13-14-8; IC 13-14-9; IC 13-18-3
Affected: IC 13-11-2-258; IC 13-18-4; IC 13-30-2-1; IC 14-22-9

This portion of the regulations outlines all the narrative and numeric WQS and relevant calculation procedures for waters outside the Great Lakes System.

327 IAC 2-1.5-8 Minimum surface water quality criteria [GLS]
Authority: IC 13-14-8; IC 13-14-9; IC 13-18-3
Affected: IC 13-11-2-258; IC 13-18-4; IC 13-30-2-1; IC 14-22-9

This portion of the regulations outlines all the narrative and numeric WQS and relevant calculation procedures for the waters of the Great Lakes System.

ARTICLE 5. INDUSTRIAL WASTEWATER PRETREATMENT PROGRAMS AND NPDES
A number of other references cite Indiana's the Industrial Wastewater Pretreatment Programs and NPDES rule at 327 IAC 5.
A PDF of Article 5 in its entirety may be found at the following link:
http://www.in.gov/legislative/iac/T03270/A00050.PDF

Some of the specific NPDES citations referenced are listed below.

327 IAC 5-2-4 Exclusions
Authority: IC 13-1-3-4; IC 13-1-3-7; IC 13-7-7; IC 13-7-10-1
Affected: IC 13-1-3; IC 13-7; IC 13-8
Sec. 4. The following discharges do not require an NPDES permit:
(1) Any discharge of sewage from vessels, effluent from properly functioning marine engines, laundry, shower, and galley sink wastes, or any other discharge incidental to the normal operation of a vessel. This exclusion does not apply to rubbish, trash, garbage, or other such materials discharged overboard; nor to other discharges when the vessel is operating in a capacity other than as a means of transportation such as when a vessel is being used as an energy or mining facility, a storage facility, or a seafood processing facility, or is secured to the bed of the waters of the state for the purpose of mineral or oil exploration or development.

(2) Discharges of dredged or fill material into waters of the state and regulated under section 404 of the CWA, except where the commissioner determines, on a case-by-case basis that such a discharge threatens to violate state water quality standards concerning toxic pollutants.
(3) The introduction of sewage, industrial wastes, or other pollutants into publicly owned treatment works by indirect dischargers. However, all applicable pretreatment standards promulgated under section 307(b) and 307(c) of the CWA must also be complied with, and may be included in the permit to the publicly owned treatment works. This exclusion does not apply to discharges through pipes, sewers, or other conveyances owned by a public entity not leading to treatment works.
(4) Any introduction of pollutants from nonpoint source agricultural and silvicultural activities, including runoff from orchards, cultivated crops, pastures, range lands, and forest lands, except that this exclusion shall not apply to discharges from concentrated animal feeding operations as defined in 327 IAC 5-4-3 or from silvicultural point sources as defined in 327 IAC 5-4-7.
(5) Any discharge in compliance with the instructions of an on-scene coordinator pursuant to 40 CFR 300 or 33 CFR 153.10(e) or of a state employee acting in a similar capacity.
(6) Discharges into a privately owned treatment works, except as the commissioner may otherwise require under section 10(e) of this rule.
(7) Any discharge by underground injection of salt or sulfur-bearing water or waste liquids associated with the recovery of oil and natural gas, if the discharge is pursuant to a valid permit issued by the natural resources commission under IC 13-8.
(8) Any discharge consisting entirely of return flows from irrigated agriculture.
(9) Deep injection wells, except in accordance with 327 IAC 5-4-2.

327 IAC 5-2-8 Conditions applicable to all permits
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3
Affected: IC 13-11-2; IC 13-18-4; IC 13-18-7-1; IC 35-50-3-3
Sec. 8. The following conditions apply to all NPDES permits and shall be incorporated into the permits either expressly or by reference:
(11) The following are requirements for bypass:
(A) The following definitions:
(i) "Bypass" means the intentional diversion of a waste stream from any portion of a treatment facility.
(ii) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
(B) The permittee may allow any bypass to occur that does not exceed any effluent limitations contained in the NPDES permit, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to clauses (C) and (D).

(C) The permittee must provide the commissioner with the following notice:
(i) If the permittee knows or should have known in advance of the need for a bypass (anticipated bypass), it shall submit prior written notice. If possible, such notice shall be provided at least ten (10) days before the date of the bypass for approval by the commissioner.
(ii) The permittee shall submit notice of an unanticipated bypass as required by subdivision (10)(C).
(D) The following provisions are applicable to bypasses:
(i) Bypass is prohibited, and the commissioner may take enforcement action against a permittee for bypass unless the following occur:
(AA) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.
(BB) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment down time or preventive maintenance.
(CC) The permittee submitted notices as required under clause (C).
(ii) The commissioner may approve an anticipated bypass, after considering its adverse effects if the commissioner determines that the anticipated bypass will meet the three (3) conditions listed in item (i). The commissioner may impose any conditions determined to be necessary to minimize any adverse effects.

327 IAC 5-2-11.1 Establishment of water quality-based effluent limitations for dischargers not discharging to waters within the Great Lakes system
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3
Affected: IC 13-11-2; IC 13-18-4
Sec. 11.1.(b) This subsection describes how the surface water quality criteria in 327 IAC 2-1-6(a) and 327 IAC 2-1-8.9(g) or those criteria derived using the procedures in 327 IAC 2-1-8.2 through 327 IAC 2-1-8.6 and 327 IAC 2-1-8.9 will be applied in determining appropriate WQBELs to NPDES permits as follows:
(1) The final acute value (FAV = 2(AAC)) will be applied directly to the undiluted discharge, or, if dilution by discharge induced mixing is allowed, the AAC will be applied outside the discharge induced mixing zone. If the AAC for a metal is expressed in the form of dissolved metal, the AAC shall be set equal to Cinstream determined for the AAC in accordance with subdivision (8).
(2) The CAC and the TLSC will be applied outside of the mixing zone. In the absence of site-specific mixing zone data, the allowable mixing zone dilution shall be determined by applying the guideline in 327 IAC 2-1-4 to the Q7,10 low flow of the receiving stream. If the CAC for a metal is expressed in the form of dissolved metal, the CAC shall be set equal to Cinstream determined for the CAC in accordance with subdivision (8).
(3) The HLSC shall be applied outside of the mixing zone, if based on the consumption of organisms and incidental water intake. If based on consumption of organisms and drinking water, the HLSC shall apply at the point of the public

water system intake, if this does not cause the HLSC based on consumption of organisms and incidental water intake to be exceeded outside of the mixing zone. Allowable mixing zone dilution shall be determined by applying the guideline of 327 IAC 2-1-4 to the Q7,10 low flow of the receiving stream if the HLSC is based on consumption of organisms and incidental water intake and the Q7,10 flow at the point of the public water system intake (provided the effluent has had time to fully mix with the receiving water) shall be allowed for dilution if the HLSC is based on consumption of organisms and drinking water.
(4) The criterion to provide an acceptable degree of protection to public health for cancer effects shall apply outside of the mixing zone if the criterion is based on consumption of organisms and incidental water intake and at the point of the public
water system intake if based on the consumption of organisms and drinking water, if this would not cause the criterion based on the consumption of organisms and incidental water intake to be exceeded outside of the mixing zone. For calculation of allowable dilution, one-fourth (¼) of the fiftieth percentile flow of the receiving stream shall be used if the criterion is based on consumption of organisms and incidental water intake, and the fiftieth percentile flow of the receiving stream at the point of the public water system intake can be used if the criterion is based on the consumption of organisms and drinking water.
(5) As used in this rule, "FAV", "AAC", "CAC", "TLSC", and "HLSC" have the meanings set forth in 327 IAC 2-1-9.
(6) For a new discharge of a BCC, the water quality standard for a BCC shall be applied directly to the undiluted discharge.
Beginning January 1, 2004, the water quality criteria for a BCC shall be applied directly to the undiluted discharge for all discharges of a BCC. As used in this subdivision, "new discharge" means a discharge of a BCC that is initiated after the effective date of this subdivision.
(7) For intermittent or controlled discharges, the mixing zone dilution may be determined using stream flows other than those specified in this subsection if these alternate stream flows will ensure compliance with water quality criteria.
(8) The following procedures shall be used to calculate Cinstream, the total recoverable metal concentration outside the mixing zone that equates to an AAC or CAC expressed in the form of dissolved metal:
(A) For an AAC expressed in the form of dissolved metal, Cinstream shall be calculated by dividing the AAC by the acute translator found in clause (D).
(B) For a CAC expressed in the form of dissolved metal, Cinstream shall be calculated by dividing the CAC by the chronic translator found in clause (D).
(C) If all approved analytical methods for the metal inherently measure only its dissolved form, such as hexavalent chromium, Cinstream shall not be calculated and the AAC and CAC expressed in the form of dissolved metal shall be applied in determining appropriate WQBELs.
(D) Unless a site-specific translator is determined in accordance with clause (E), the following translators shall be used:
Table 11.1-1
Metals Translators

Dissolved to Total Recoverable
Acute Chronic
Substances Translators Translators
Arsenic (III) 1.000 1.000
Cadmium 1.136672-[(ln hardness)(0.041838)] 1.101672-[(ln hardness)(0.041838)]
Chromium (III) 0.316 0.860
Copper 0.960 0.960
Lead 1.46203-[(ln hardness)(0.145712)] 1.46203-[(ln hardness)(0.145712)]
Nickel 0.998 0.997
Silver 0.85
Zinc 0.978 0.986
(E) A discharger or proposed discharger may request the use of an alternate translator by using site-specific data. The discharger must conduct a site-specific study to identify the ratio of the dissolved fraction to the total recoverable fraction for a metal in the receiving waterbody outside the mixing zone. If the discharger provides an acceptable study and other provisions of 327 IAC 2-1 and this article are satisfied (such as antibacksliding and antidegradation), the commissioner shall use the site-specific translator. A translator derived for one (1) discharge into a waterbody segment may be applied to other discharges on the same waterbody segment if the translator would adequately represent the sitespecific conditions applicable to the other discharges.

327 IAC 5-2-11.4 Great Lakes system dischargers total maximum daily loads; wasteload allocations for point sources; load allocations for nonpoint sources; preliminary wasteload allocations

327 IAC 5-2-11.4 (a)(8) Background loadings may be accounted for in a TMDL through an allocation to a single background category or through individual allocations to the various background sources as follows:
(A) As used in this subsection, "background" represents all loadings resulting from the following:
(i) Flow from upstream waters into the specified watershed, waterbody, or waterbody segment for which a TMDL, WLA in the absence of a TMDL, or preliminary WLA for the purpose of determining the need for a WQBEL is being developed.
(ii) Atmospheric deposition or sediment release or resuspension.
(iii) Chemical reactions occurring within the watershed, waterbody, or waterbody segment.
(B) When determining what available data are acceptable for use in calculating background, the commissioner shall use best professional judgment, including consideration of the sampling location and the reliability of the data through comparison to reported analytical detection levels. Pollutant degradation and transport information may be considered when utilizing pollutant loading data. Where limited or no acceptable data exist, the commissioner may require the permittee to supply the necessary data. Best professional judgment shall be used

to select the one (1) data set that most accurately reflects or estimates background concentrations when data in more than one (1) of the following data setsor categories exist:
(i) Acceptable available water column data.
(ii) Water column concentrations estimated through use of acceptable available caged or resident fish tissue data.
(iii) Water column concentrations estimated through use of acceptable available or projected pollutant loading data.
(C) The representative background concentration for a substance in the specified watershed, waterbody, or waterbody segment shall be established as follows:
(i) If all the values in the data set selected in clause (B) are at or above the LOD, then the background concentration is the geometric mean of that data set.
(ii) If the data set consists of values above and below the LOD, the following procedure shall be used to determine the representative background concentration:
(AA) Each value in the data set with a value less than the LOD (nondetect) shall be assigned the value (V).
The geometric mean of this adjusted data set is the representative background concentration. The value (V) is determined as follows:

V = (LOD) x (1 - Number of nondetects/Total number of values)

(BB) If information is available that indicates an alternate methodology for evaluating the data set would result in a background concentration more representative of actual conditions, this alternative methodology may be used in place of the methodology contained in subitem (AA) upon approval of the commissioner.
(iii) When all of the acceptable available data in a data set or category, such as water column, caged or residentfish tissue, or pollutant loading data, are below the LOD for a substance, and the most sensitive approved analytical method available for that substance was used, then all the data for that pollutant in that data set shall be assumed to be zero (0).
(iv) Notwithstanding items (i) through (iii), the representative background concentration of whole effluent toxicity (WET) shall be assumed to be zero (0) unless data are available that indicates that the discharge of the WET and any background WET are additive.

327 IAC 5-2-11.4 (b) The following requirements shall be applied in establishing the portion of the receiving waterbody allocated for mixing for TMDLs, WLAs in the absence of TMDLs, and preliminary WLAs:
(3) The following describes conditions for deriving TMDLs, WLAs in the absence of TMDLs, and preliminary WLAs for tributaries of the Great Lakes system that exhibit appreciable flows relative to their volumes:
(A) The following stream design flows shall be used unless data exist to demonstrate that an alternative stream design flow is appropriate for stream-specific and pollutant-specific conditions:

(i) For purposes of calculating a TMDL, WLAs in the absence of a TMDL, or preliminary WLAs, using a steadystate model, the stream design flows shall be as follows:
(AA) For an acute aquatic life criterion or value, the one (1) day, ten (10) year stream design flow (Q1,10).
(BB) To implement the narrative acute WET criterion, when a mixing zone demonstration is conducted and approved under subdivision (4), the one (1) day, ten (10) year stream design flow (Q1,10).
(CC) For a chronic aquatic life criterion or value, the seven (7) day, ten (10) year stream design flow (Q7,10).
(DD) To implement the narrative chronic WET criterion, the seven (7) day, ten (10) year stream design flow (Q7,10).
(EE) For a drinking water human health criterion or value, the harmonic mean flow at the point of the public water system intake.
(FF) For a nondrinking water human health criterion or value, the harmonic mean flow at the point of discharge.
(GG) For a WC or WV, the ninety (90) day, ten (10) year stream design flow (Q90,10).
(ii) TMDLs, WLAs in the absence of TMDLs, and preliminary WLAs calculated using dynamic modelling do not need to incorporate the stream design flows specified in item (i).
(iii) TMDLs, WLAs in the absence of TMDLs, and preliminary WLAs calculated for intermittent or controlled discharges may use alternate stream design flows if these alternate design flows will ensure compliance with water quality criteria and values.
(B) To prevent acute toxicity, WLAs and LAs established in a TMDL, WLAs in the absence of a TMDL, and preliminary WLAs shall be determined as follows:
(i) For allocations based on an acute aquatic life criterion or value, the CMC or SMC shall not be exceeded outside the zone of initial dilution and the FAV shall not be exceeded in the undiluted discharge unless a mixing zone demonstration is conducted and approved under subdivision (4), in which case the CMC or SMC shall be met outside the applicable alternate mixing zone.
(ii) For allocations implementing the narrative acute WET criterion, one and zero-tenths (1.0) TUa shall not be exceeded in the undiluted discharge unless a mixing zone demonstration is conducted and approved under subdivision (4), in which case three-tenths (0.3) TUa shall be met outside the applicable alternate mixing zone.
(C) To protect aquatic life, wildlife, and human health from chronic effects, including chronic WET, WLAs and Las established in a TMDL, WLAs in the absence of a TMDL, and preliminary WLAs shall be calculated using a dilution fraction no greater than twenty-five percent (25%) of the stream design flow unless a mixing zone demonstration under subdivision (4) is conducted and approved.
(D) If mixing zones from two (2) or more proximate sources interact or overlap, the combined effect must be evaluated to ensure that applicable criteria and values will be met in the area where any applicable mixing zones overlap.

(E) In no case shall a permitting authority grant a mixing zone that would likely jeopardize the continued existence of any endangered or threatened species listed under Section 4 of the ESA or result in the destruction or adverse modification of such species' critical habitats.
(6) For discharges into the open waters of Lake Michigan, if all of the conditions for approval of an alternate mixing zone are met in accordance with subdivision (4), the alternate mixing zone shall be granted unless the commissioner determines that the mixing zone should be denied based upon a consideration of harm to human health, aquatic life, or wildlife. The commissioner shall evaluate all available information, including information submitted by the public, relevant to the consideration of harm to human health, aquatic life, or wildlife. The commissioner shall identify the harm to human health, aquatic life, or wildlife, and document the rationale for this decision.
(7) The commissioner's evaluation of a mixing zone for a discharge into the open waters of Lake Michigan under subdivisions (2), (4), and (6) shall constitute the evaluation required by IC 13-18-4-7. Any decision regarding the granting or denial of a mixing zone for a discharge into Lake Michigan shall be included in the public notice of the tentative decision on the draft new, renewed, or modified permit. The basis for the tentative decision, including the commissioner's rationale for concluding whether or not the requirements of IC 13-18-4-7 are satisfied, shall be included in the briefing memo or fact sheet that accompany the tentative decision on the draft new, renewed, or modified permit.

327 IAC 5-3-6 Tentative permit decisions and draft permits
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3
Affected: IC 13-11-2; IC 13-18-4
Sec. 6. (a) If a permit has been properly requested under section 2 of this rule, the commissioner, after analyzing the data and other information furnished in the permit application and any other relevant information, shall tentatively decide whether to issue or deny the permit.
(b) If the commissioner tentatively decides to issue a permit, a draft permit shall be prepared containing:
(1) all conditions, limitations, or requirements specified in 327 IAC 5-2-6, 327 IAC 5-2-8, and 327 IAC 5-2-9;
(2) all effluent limitations, standards, prohibitions, and conditions required by 327 IAC 5-2-10, including all applicable variances or other statutory modifications which have been requested and appear justified under these rules;
(3) all compliance schedules required by 327 IAC 5-2-12 and 327 IAC 5-2-12.1; and
(4) all monitoring, recording, and reporting requirements specified by 327 IAC 5-2-13, 327 IAC 5-2-14, and 327 IAC 5-2-15.
(c) A decision by the commissioner to deny a permit application shall be made through the same procedures under this rule as any other permit decision. A notice of intent to deny a permit shall be made available for public comment under section 9 of this rule.

(d) If the commissioner determines, either as a result of a request under section 3 of this rule or on the commissioner's own initiative, that the modification or the revocation and reissuance of a permit is warranted under 327 IAC 5-2-16, the commissioner shall formulate a draft permit incorporating the proposed changes in accordance with the following conditions:
(1) In the case of a permit modification:
(A) the draft permit need not include the entire permit but may be restricted to the permit provisions that are proposed
to be modified; and
(B) only those terms in the existing permit that are affected by the proposed modification will be reopened, however, such terms of the existing permit remain in force until a modification is issued and becomes finally effective under this article. All other aspects of the permit will remain in force until the expiration of the permit.
(2) If the permit is proposed to be revoked and reissued, the entire permit is reopened just as if the permit had expired and was
being reissued. During any proceeding for revocation and reissuance of a permit, the permittee shall comply with all conditions of the existing permit until the new permit is reissued.
(3) If needed for the preparation of a draft permit under this subsection, the commissioner may request additional information,
including, in appropriate cases, a complete new permit application.
(e) If the commissioner decides, either as a result of a request or on the commissioner's own initiative, that a permit shall be terminated pursuant to 327 IAC 5-2-16, the commissioner shall prepare a notice of intent to terminate which shall be made available for public comment. The decision shall be finalized through the procedures applicable under this rule to any other permit decision. Pending issuance of a final decision to terminate a permit, the terms and conditions of the permit shall remain in full force and effect.
(f) General permits to be issued under 327 IAC 15 shall be proposed in draft form, shall contain the designation of the general permit area and, except for general permits for separate storm sewers, shall be sent to the EPA for concurrence or objection during the public comment period. No final permit shall be issued if the regional administrator or the EPA deputy assistant administrator for water enforcement objects to the general permit within ninety (90) days from the date of publication of the public notice for the draft general permit.

327 IAC 5-3-9 Public comments and public hearings
Authority: IC 13-1-3-4; IC 13-1-3-7; IC 13-7-7; IC 13-7-10-1
Affected: IC 4-21.5; IC 4-22-1; IC 13-1-3; IC 13-7
Sec. 9. (a) A comment period of at least thirty (30) days following the date of public notice of the formulation of a draft permit shall be provided. During this period any interested persons may submit written comments on the draft permit and may request a public hearing in accordance with subsection (b). All comments, including those submitted in a public hearing, shall be considered by

the commissioner in preparing the final permit and shall be responded to as provided in 327 IAC 5-3-15.
(b)(1) A public hearing on a draft permit may be held by the commissioner in appropriate cases, either on the commissioner's
own initiative or in response to a request or requests for public hearing submitted during the public comment period. Such a hearing
shall be held where the commissioner finds there is a significant public interest in the draft permit. Instances of doubt will be resolved in favor of holding a hearing. Public notice of a public hearing shall be given as specified in 327 IAC 5-3-12.
(2) A request for a public hearing shall be in writing and shall state the nature of the issues to be raised and the reasons why a hearing is warranted.
(3) Any hearing conducted pursuant to this section shall be held in the geographical area of the proposed discharge, or other appropriate area where significant public interest exists in the discretion of the commissioner, and may, when appropriate, consider two or more related draft permits.
(4) Any person appearing at such a hearing may submit oral or written statements and data concerning the draft permit.
Reasonable limits may be set upon the time allowed for oral statements, and the submission of statements in writing may be required.
A hearing conducted under this section shall not constitute an "administrative adjudication" for purposes of IC 4-22-1 or IC 4-21.5.
(c) All persons, including the applicant, who believe any of the terms and conditions of a draft permit or a tentative decision to deny or terminate a permit is not appropriate for any reason, must raise all reasonably ascertainable issues and submit all arguments and a summary of the factual grounds supporting their position by the close of the public comment period (including any public hearing period).
(d) Since a general permit is in the nature of rule, public notice and public hearing of the proposed issuance of a general permit must be given in accordance with statutorily prescribed procedures for administrative agency rulemaking as well as the provisions
of this section and 327 IAC 5-3-12.

327 IAC 5-5-2 Technology-based treatment requirements
Authority: IC 13-1-3-4; IC 13-1-3-7; IC 13-7-7; IC 13-7-10-1
Affected: IC 13-1-3; IC 13-7
Sec. 2. (a) Technology-based treatment requirements under sections 301(b) and 306 of the CWA represent the minimum level of control that must be imposed in an NPDES permit issued under section 402 of the CWA for an existing source and a new source, respectively. Compliance with these technology-based treatment requirements is required within the times prescribed in section 301(b)(2) of the CWA and 40 CFR 123.3(a)(2). Notwithstanding these minimum technology-based requirements, more stringent treatment requirements may be imposed under section 301(b)(1)(C), 302, or 307(a)(2) of the CWA.
(b) Technology-based treatment requirements may be imposed through one (1) of the following methods:

(1) Application of EPA-promulgated effluent limitations developed under section 304 or 306 of the CWA to discharges by category or subcategory. These effluent limitations are not applicable to the extent that they have been remanded or withdrawn. However, in the case of a court remand, determinations underlying effluent limitations shall be binding in permit issuance proceedings where those determinations are not required to be reexamined by a court remanding the regulations. In addition, dischargers may seek fundamentally different factors variances from these effluent limitations under 327 IAC 5-6. If a fundamentally different factors variance is approved by EPA under 40 CFR 125, Subpart D, the resulting effluent limitations are technology-based treatment requirements for purposes of this article.
(2) On a case-by-case basis under section 402(a)(1) of the CWA, to the extent that EPA-promulgated effluent limitations are unavailable. Standards of performance for new sources cannot be developed on an ad hoc basis under section 402(a)(1) of the CWA. By statutory definition, a source is a new source only if standards of performance applicable to such source have been promulgated by EPA. The commissioner shall apply the appropriate factors listed in section 304 of the CWA and shall consider the following:
(A) The appropriate technology for the category or class of point sources of which the applicant is a member, based
upon all available information (including EPA draft or proposed development documents or guidance).
(B) Any unique factors relating to the applicant.
(3) Through a combination of the methods in subdivisions (1) and (2). Where promulgated effluent limitations guidelines only apply to certain aspects of the discharger's operation, or to certain pollutants, other aspects or activities are subject to regulation on a case-by-case basis in order to carry out the provisions of the CWA.
(c) Technology-based treatment requirements are applied prior to or at the point of discharge.
(d) Technology-based treatment requirements cannot be satisfied through the use of nontreatment techniques such as flow augmentation and instream mechanical aerators. However, these techniques may be considered as a method of achieving water quality standards on a case-by-case basis when:
(1) the technology-based treatment requirements applicable to the discharge are not sufficient to achieve the promulgated water quality standards;
(2) the discharger agrees to waive any opportunity to request a variance under section 301(c) or 301(g) of the CWA; and
(3) the discharger demonstrates that such a technique is the preferred environmental and economic method to achieve the standards after consideration of alternatives such as advanced waste treatment, recycle and reuse, land disposal, changes in operating methods, and other available methods.
(e) Technology-based effluent limitations shall be established under this rule for solids, sludges, filter backwash, and other pollutants removed in the course of

treatment or control of wastewaters in the same manner as for other pollutants if such pollutants are proposed to be discharged.
(f) Other provisions of this rule notwithstanding, the commissioner may do the following:
(1) Set a permit limit for conventional pollutants at a level more stringent than the best conventional pollution control technology (BCT), or a limit for a nonconventional pollutant which shall not be subject to modification under section 301(c) or 301(g) of the CWA, where:
(A) effluent limitations guidelines specify the pollutant as an indicator for a toxic pollutant; or
(B)(i) the limitation reflects BAT level control of discharges of one (1) or more toxic pollutants which are present in the waste stream, and a specific BAT limitation upon the toxic pollutants is not feasible for economic or technical reasons;
(ii) the permit identifies which toxic pollutants are intended to be controlled by use of the limitation; and
(iii) the fact sheet required by 327 IAC 5-3-8 sets forth the basis for the limitation, including a finding that compliance with the limitation will result in BAT level control of the toxic pollutant discharges identified in item (ii), and a finding that it would be economically or technically infeasible to directly limit the toxic pollutants.
(2) Set a permit limit for a conventional pollutant at a level more stringent that *[sic., than]* BCT when any of the following occur:
(A) Effluent limitations guidelines specify the pollutant as an indicator for a hazardous substance.
(B) The following are established:
(i) The limitation reflects BAT level control of discharges (or an appropriate level determined under section 301(c) or 301(g) of the CWA) of one (1) or more hazardous substances which are present in the waste stream, and a specific BAT (or other appropriate) limitation upon the hazardous substances is not feasible for economic or technical reasons.
(ii) The permit identifies which hazardous substances are intended to be controlled by use of the limitation.
(iii) The fact sheet sets forth the basis for the limitation, including a finding that compliance with the limitations will result in BAT level (or appropriate level) control of the hazardous substances discharges identified in item (ii), and a finding that it would be economically or technically infeasible to directly limit the hazardous substances.
(C) Hazardous substances which are also toxic pollutants are subject to subdivision (1).
(3) Not set a more stringent limit under subdivision (1) or (2) if the method of treatment required to comply with the limit differs from that which would be required if the toxic pollutants or hazardous substances controlled by the limit were limited directly.

(g) Toxic pollutants identified under subsection (f)(1) remain subject to the requirements of 327 IAC 5-2-9, concerning notification of increased discharges of toxic pollutants above levels reported in the application form.
(h) In setting case-by-case limitations pursuant to subsection (b), the permit writer must consider the following factors:
(1) The following are requirements for BPT:
(A) The total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application.
(B) The age of equipment and facilities involved.
(C) The process employed.
(D) The engineering aspects of the application of various types of control techniques.
(E) Process changes.
(F) Nonwater quality environmental impact, including energy requirements.
(2) The following are requirements for BCT:
(A) The reasonableness of the relationship between the costs of attaining a reduction in effluent and the effluent reduction benefits derived.
(B) The comparison of the cost and level of reduction of such pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources.
(C) The age of equipment and facilities involved.
(D) The process employed.
(E) The engineering aspects of the application of various types of control techniques.
(F) Process changes.
(G) Nonwater quality environmental impact, including energy requirements.
(3) The following are requirements for BAT:
(A) The age of equipment and facilities involved.
(B) The process employed.
(C) The engineering aspects of the application of various types of control techniques.
(D) Process changes.
(E) The cost of achieving such effluent reduction.
(F) Nonwater quality environmental impact, including energy requirements.